Complete Summary

TITLE

Comprehensive diabetes care: percentage of members with diabetes mellitus (type 1 and type 2) who had hemoglobin A1c (HbA1c) poorly controlled (greater than 9.0%).

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of members 18 to 75 years of age with diabetes (Type 1 and Type 2) who were continuously enrolled during the measurement year and who had hemoglobin A1c (HbA1c) poorly controlled (greater than 9.0%).

This measure is a component of a composite measure; it can also be used on its own.

Note from the National Quality Measures Clearinghouse (NQMC): For this measure there is both Administrative and Hybrid Specifications. This NQMC measure summary is based on the Administrative Specification. Refer to the original measure documentation for details pertaining to the Hybrid Specification.

RATIONALE

Effective use of hemoglobin A1c (HbA1c) testing is an important means to minimize further health risks from diabetes. This measure is consistent with the National Diabetes Quality Improvement Alliance (NDQIA) set of measures.

PRIMARY CLINICAL COMPONENT

Diabetes mellitus; hemoglobin A1c (HbA1c)

DENOMINATOR DESCRIPTION

Members with diabetes (Type 1 and Type 2) age 18 through 75 years of age as of December 31 of the measurement year (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

The most recent hemoglobin A1c (HbA1c) level during the measurement year greater than 9.0%, using automated laboratory data (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/Medicare
External oversight/State government program
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 18 through 75 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Diabetes is one of the most costly and highly prevalent chronic diseases in the United States. Approximately 17 million Americans have diabetes and half these cases are undiagnosed. Individuals diagnosed as diabetic are grouped into two main diagnostic categories based on the etiologic nature of their underlying disease. Over 90% are Type 2 diabetics (previously termed non-insulin dependent), with the remainder being Type 1, or insulin-dependent diabetics.

EVIDENCE FOR INCIDENCE/PREVALENCE

Harris MI. Summary. In: National Diabetes Data Group. Diabetes in America [NIH Pub. No. 95-1468]. 2nd ed. Bethesda (MD): National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases; 1995. p. 1-13.

National Committee for Quality Assurance (NCQA). HEDIS 2006: narrative: what's in it and why it matters. Vol. 1. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 88 p.

National Diabetes Information Clearinghouse. Diabetes statistics [NIH Pub. No. 94-3822]. Bethesda (MD): National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); 1994.

Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. Diabetes Care1997 Jul;20(7):1183-97. PubMed

ASSOCIATION WITH VULNERABLE POPULATIONS

Elderly

EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS

Harris MI. Summary. In: National Diabetes Data Group. Diabetes in America [NIH Pub. No. 95-1468]. 2nd ed. Bethesda (MD): National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases; 1995. p. 1-13.

BURDEN OF ILLNESS

As a result, diabetes mellitus is the seventh leading cause of death in the U.S., contributing to 160,000 deaths annually and nearly 20% of all deaths in persons over age 25. Complications of diabetes include metabolic abnormalities, micro and macrovascular disorders, blindness, neuropathy and renal insufficiency. Diabetic morbidity produces significantly increased health utilization and disability among those afflicted.

EVIDENCE FOR BURDEN OF ILLNESS

American Diabetes Association. Diabetes 1996 vital statistics. Alexandria (VA): American Diabetes Association; 1995.

Harris MI. Summary. In: National Diabetes Data Group. Diabetes in America [NIH Pub. No. 95-1468]. 2nd ed. Bethesda (MD): National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases; 1995. p. 1-13.

UTILIZATION

In 1990, diabetics made 53 million visits to physician offices, another 30 million visits to outpatient clinics and other ambulatory care settings, nearly 2 million visits to emergency departments, and had 11 million telephone contacts.

EVIDENCE FOR UTILIZATION

American Diabetes Association. Diabetes 1996 vital statistics. Alexandria (VA): American Diabetes Association; 1995.

COSTS

Direct and indirect costs of diabetes have a significant impact on society, especially when lost productivity due to diabetes-related morbidity and mortality is included. The Medical Technology and Practice Patterns Institute estimated the 1992 cost of diabetes in the United States to be $91.8 billion. This figure includes $45.2 billion for direct health care costs and $46.4 billion for indirect costs. Complications from diabetes cost the country nearly $100 billion annually.

EVIDENCE FOR COSTS

American Diabetes Association. Diabetes 1996 vital statistics. Alexandria (VA): American Diabetes Association; 1995.

National Committee for Quality Assurance (NCQA). HEDIS 2006: narrative: what's in it and why it matters. Vol. 1. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 88 p.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Members with diabetes (Type 1 and Type 2) age 18 through 75 years of age as of December 31 of the measurement year, who were continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days (commercial, Medicare) during the measurement year and not more than one-month gap in coverage (Medicaid)

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Members with diabetes (Type 1 and Type 2) age 18 through 75 years of age as of December 31 of the measurement year

Two methods are provided to identify diabetic members--pharmacy data and claims/encounter data. The managed care organization (MCO) must use both methods to identify the eligible population; however, a member only needs to be identified in one method to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.

Pharmacy data. Members who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or the year prior to the measurement year on an ambulatory basis. Refer to Table CDC-A in the original measure documentation for prescriptions to identify diabetics using pharmacy data.

Claims/encounter data. Members who had two face-to-face encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one face-to-face encounter in an acute inpatient or emergency room setting during the measurement year or the year prior to the measurement year with a diagnosis of diabetes. The MCO may count services that occur over both years. Refer to Table CDC-B in the original measure documentation codes to identify ambulatory or non-acute inpatient and acute inpatient or emergency department (ED) encounters.

Exclusions

Exclude members with a diagnosis of polycystic ovaries who did not have any face-to-face encounters with the diagnosis of diabetes, in any setting, during the measurement year or year prior to the measurement year. Diagnosis of polycystic ovaries can occur at any time in the member's history, but must have occurred by December 31 of the measurement year. Use the codes in Table CDC-B in the original measure documentation to identify a diagnosis of diabetes and the International Classification of Diseases, Ninth Revision (ICD-9) codes in Table CDC-H to identify a diagnosis of polycystic ovaries.

Exclude any members with gestational diabetes or steroid-induced diabetes during the measurement year (refer to Table CDC-H in the original measure documentation).

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Therapeutic Intervention

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
The most recent hemoglobin A1c (HbA1c) level during the measurement year greater than 9.0%, using automated laboratory data

Note: For this indicator, a lower rate indicates better performance (i.e., low rates of poor control indicate better care).

Exclusions
If the automated result for the most recent HbA1c test during the measurement year is less than or equal to 9.0% or is missing or if an HbA1c test was not done during the measurement year, the member is not numerator compliant.

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Laboratory data
Pharmacy data

LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

OUTCOME TYPE

Clinical Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a lower score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for commercial, Medicare, and Medicaid product lines.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Comprehensive diabetes care (CDC) [HbA1c poorly controlled (greater than 9.0%)].

MEASURE COLLECTION

HEDIS® 2006: Health Plan Employer Data and Information Set

MEASURE SET NAME

Effectiveness of Care

COMPOSITE MEASURE NAME

Comprehensive Diabetes Care (CDC)

DEVELOPER

National Committee for Quality Assurance

INCLUDED IN

Ambulatory Care Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

1999 Jan

REVISION DATE

2005 Jan

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2004. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2003. 374 p.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

MEASURE AVAILABILITY

The individual measure, "Comprehensive Diabetes Care (CDC) [HbA1c Poorly Controlled (Greater Than 9.0%)]," is published in "HEDIS 2006. Health Plan Employer Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 74 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on July 18, 2003. The information was verified by the measure developer on August 29, 2003. This NQMC summary was updated by ECRI on June 16, 2006. The updated information was not verified by the measure developer.

COPYRIGHT STATEMENT

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For detailed specifications regarding the National Committee on Quality Assurance (NCQA) measures, refer to HEDIS Volume 2: Technical Specifications, available from the NCQA Web site at www.ncqa.org.

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